

REMARKS

This Amendment and Response to Non-Final Office Action is being submitted in response to the non-final Office Action mailed December 13, 2005. Claims 1-42 are pending in the Application. Claims 1 and 22 are the independent claims.

Claims 1-42 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sondur et al. (U.S. Patent No. 6,243,746) in view of Wilson et al. (Wilson, Brian J. et al. "Multiwavelength Optical Networking Management and Control," Journal of Lightwave technology, vol. 18, no. 12, December 2000, pp. 2038-2057).

In response to these rejections, the Claims have been amended herein, without prejudice or disclaimer to continued examination on the merits. These amendments are fully supported in the Specification, Drawings, and Claims of the Application and no new matter has been added. Based upon the amendments, reconsideration of the Application is respectfully requested in view of the following remarks.

Rejection of Claims 1-42 Under 35 U.S.C. 103(a) – Sondur et al. and Wilson et al:

Claims 1-42 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sondur et al. (U.S. Patent No. 6,243,746) in view of Wilson et al. (Wilson, Brian J. et al. “Multiwavelength Optical Networking Management and Control,” Journal of Lightwave technology, vol. 18, no. 12, December 2000, pp. 2038-2057). Claims 1 and 22 are the independent claims.

Examiner states that Sondur et al. teach a network element in an optical communications network, the network element comprising: a data collection application program interface (API) for receiving a request from a client for network topology information, a topology gatherer module in communication with said data collection API, a topology change module in communication with said data collection API, and a gateway node module in communication with said data collection API, wherein one of said topology gatherer module, topology change module and gateway node module provides the network topology information requested by the client to said data collection API, said data collection API providing the network topology information to the client.

Claim 1 has been amended to recite:

A network element in an optical communications network,
the network element comprising:

a data collection application program interface (API) for
receiving a request from a client for network topology information;

a topology gatherer module in communication with said
data collection API, ***wherein said topology gatherer module
obtains channel connection trail data identifying network
connections, channel end-to-end connection data, and client
mapping data, for a channel on the optical communications
network;***

a topology change module in communication with said data
collection API, ***wherein said topology change module obtains
topology change information based on a channel entry in a***

multispan database associated with the optical communications network; and

a gateway node module in communication with said data collection API, ***wherein said gateway node module obtains a gateway node object identifying a network element where a channel originates or terminates on the optical communications network;***

wherein one of said topology gatherer module, topology change module and gateway node module provides the network topology information requested by the client to said data collection API, said data collection API providing the network topology information to the client.

Claim 22 has been amended similarly to recite:

A method of collecting optical communications network topology, the method comprising:

receiving a request for network topology information from a client at a data collection application program interface (API);

generating a command to one of a topology gatherer module, a topology change module, and a gateway node module for the network topology information; and

providing the network topology information to data collection API;

the data collection API providing the network topology information to the client;

wherein said topology gatherer module obtains channel connection trail data identifying network connections, channel end-to-end connection data, and client mapping data, for a channel on the optical communications network;

wherein the topology change module obtains topology change information based on a channel entry in a multispan database associated with the optical communications network; and

wherein the gateway node module obtains a gateway node object identifying a network element where a channel originates or terminates on the optical communications network.

These amendments are fully supported in the Specification, Drawings, and Claims of the Application and no new matter has been added.

As noted by Examiner, Sondur et al. do not specifically teach that the means for gathering information about the topology and the means for detecting topology changes are implemented as a topology gatherer module and a topology change module. Additionally, as noted by Examiner, Sondur et al. do not specifically disclose a gateway node module. Furthermore, as noted by Examiner, Sondur et al. do not specifically disclose a network element in an optical communications network. Examiner further states that it would have been obvious to those skilled in the art to combine the teachings of Sondur et al. and Wilson et al. to remedy these deficiencies in Sondur et al.

Applicants assert, however, that the present invention discloses a network element, in an optical network, that includes a topology gatherer module, a topology change module, and gateway node module that is unique with respect to Sondur et al., Wilson et al., and the combination of Sondur et al. and Wilson et al. Applicants further assert that, as amended, the claims of the present invention define a system and method with limitations not taught by Sondur et al. and Wilson et al.

For example, the present invention discloses a topology gatherer module in communication with said data collection API, wherein said topology gatherer module obtains channel connection trail data identifying network connections channel end-to-end connection data, and client mapping data for a channel along the optical communications network. Thus, ***the topology gatherer module gathers three types of topology data: channel connection trail data identifying network connections, channel end-to-end connection data, and client mapping data for a channel along the optical communications network.*** This limitation is not taught by Sondur et al. Nor is this deficiency remedied by Wilson et al.

Additionally, the present invention discloses a topology change module in communication with said data collection API, wherein ***the topology change module obtains topology change information based on a channel entry in a multispan database***

associated with the optical communications network. This specific limitation is not taught by Sondur et al. Nor is this deficiency remedied by Wilson et al.

Furthermore, the present invention discloses a gateway node module in communication with said data collection API, wherein ***the gateway node module obtains a gateway node object identifying a network element where a channel originates or terminates on the optical communications network.*** The gateway node object is a data structure that is broadcast along the transport network to the network elements. The gateway node object identifies a channel and the network element where the channel originates or terminates. This specific limitation is not taught by Sondur et al. Nor is this deficiency remedied by Wilson et al.

Claims 2-21 are dependent claims either directly or ultimately dependent on Claim 1. Claims 23-42 are dependent claims either directly or ultimately dependent on Claim 22. Based on the same unique and novel features of the present invention as described above, namely that Claims 1 and 22, have unique and patentable novel features, it is respectfully asserted that these dependent claims are now in condition for allowance.

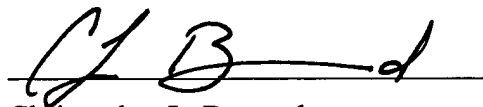
Therefore, Applicant submits that the rejection of Claims 1-42 under 35 U.S.C. 103(a) as being unpatentable over Sondur et al. in view of Wilson et al. has now been overcome and respectfully requests that this rejection be withdrawn.

CONCLUSION

Applicants would like to thank Examiner for the attention and consideration accorded the present Application. Should Examiner determine that any further action is necessary to place the Application in condition for allowance, Examiner is encouraged to contact undersigned Counsel at the telephone number, facsimile number, address, or email address provided below. It is not believed that any fees for additional claims, extensions of time, or the like are required beyond those that may otherwise be indicated in the documents accompanying this paper. However, if such additional fees are required, Examiner is encouraged to notify undersigned Counsel at Examiner's earliest convenience.

Respectfully submitted,

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